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BIOLOGICAL REVIEW

FOR

Lake Havasu Airpark

May 2012

BIOLOGICAL REVIEW

1. PROJECT LOCATION AND DESCRIPTION

Lake Havasu City (City) plans to develop 65.98 acres of Land owned by the City, located within the City limits near the Lake Havasu City Airport for a dragstrip race track and ancillary facilities, including stand seating, pit area, and parking. The proposed site (e.g. study area) is located in the north ½ of Section 15, Township 14 North, Range 20 West. The area is bounded by the Lake Havasu City Airport and open desert to the north, homes and open desert to the south, the Lake Havasu City Wastewater Treatment Plant and open desert to the east, and open desert to the west. State Route 95 (SR 95) to located further west (Figure 1).

Terrain in the area proposed for the racetrack ranges in elevation from approximately 800 feet to 900 feet above mean sea level. The area includes Wing Mine Wash that flows through the study area and is a tributary to the Colorado River. The closest major topographic landforms to the study area are the Colorado River/Lake Havasu approximately 2 miles west of the study area and the Mohave Mountains just northeast of the study area.

The Soil Survey of Mohave County, Southern Part, indicates that the study area includes four soil types. The predominant soil types are Carrizo family very gravelly loam sand, 1 to 3 percent slopes (81 percent of the study area); Chuckwalla-Riverbend families complex, 2 to 15 percent slopes (4 percent of the study area); Gunsight very gravelly loam, 2 to 15 percent slopes (15 percent of study area); and Rock outcrop-Hider complex, 35 to 65 percent slopes (less than 1 percent of study area) (NRCS 2006).

2. STUDY AREA

The vegetative community is relatively simple, open, and characteristic of the Lower Colorado and Subdivision of Sonoran desertscrub (Brown 1994). Dominant plant species include white bursage (*Ambrosia dumosa*), creosote bush (*Larrea tridentata*), brittlebush (*Encelia farinosa*), and foothills palo verde (*Parkinsonia microphylla*).

Weedy plant species found in the study area include dodder (*Cuscuta* sp.), a State of Arizona Noxious Weed, Russian thistle (*Salsola iberica*), Sahara mustard (*Brassica tournefortii*), filaree (*Erodium cicutarium*), and Mediterranean grass (*Schismus* sp.).

Common wildlife species for the study area include coyote (*Canis latrans*), Harris' antelope squirrel (*Ammospermophilus harrisii*), Gambel's quail (*Callipepla gambeli*), and turkey vulture (*Cathartes aura*). A complete list of plant and wildlife species observed in the study area is found below in Table 2.1.

3. SPECIAL STATUS SPECIES IDENTIFICATION

On April 10, 2012 Atkins obtained a list of threatened, endangered, proposed, and candidate species for Mohave County from the U.S. Fish and Wildlife Service (FWS) as well as a list of State of Arizona and Federal species of concern for the study area from the Arizona Game and Fish Online Environmental Review Tool. These lists were reviewed to identify potential species occurrence within the study area. The results are presented in table 3.1.

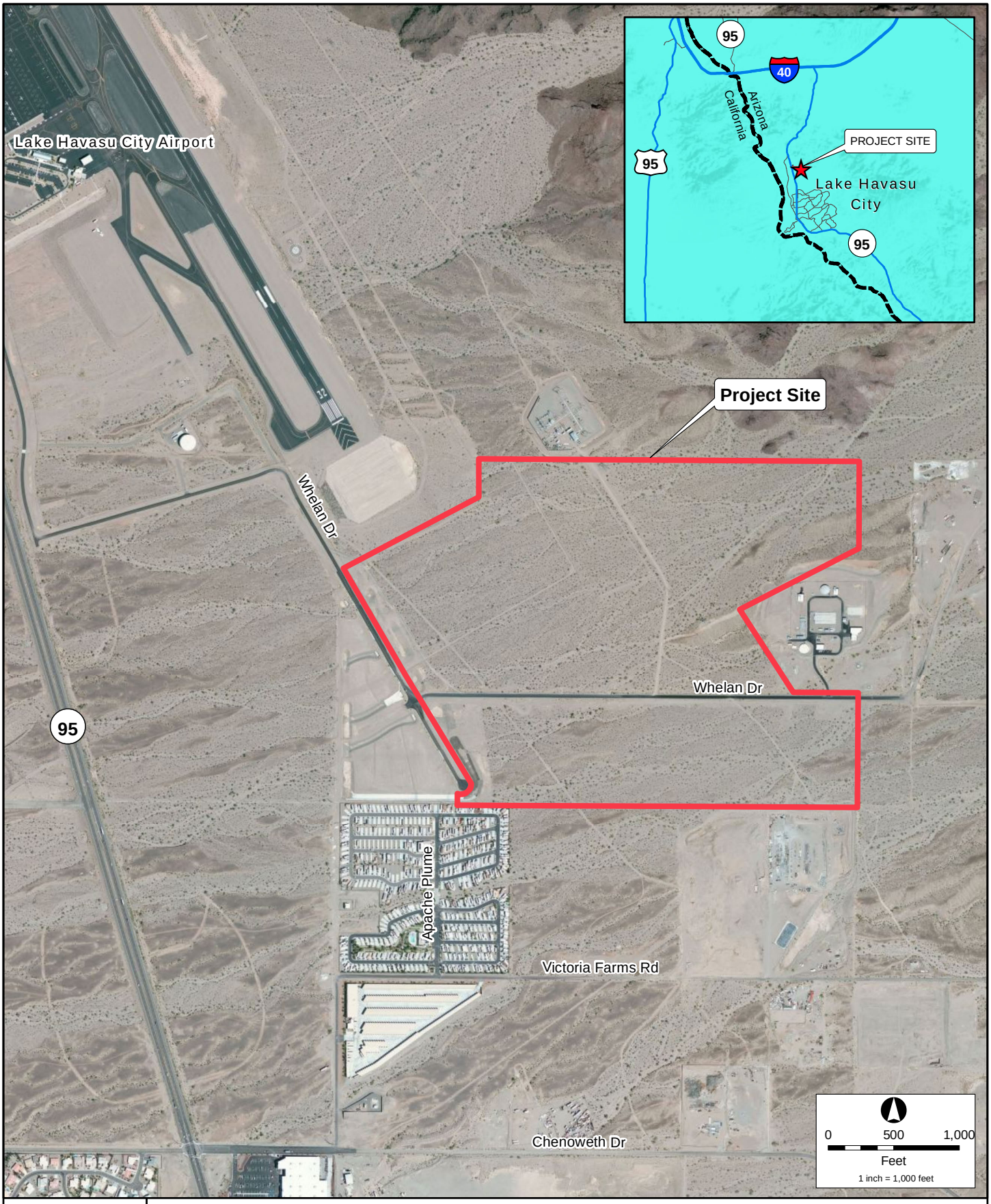

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Table 2.1 Wildlife and Plant Species Observed in the Study Area

Common Name	Scientific Name
WILDLIFE	
Mammals	
Harris' antelope squirrel	*Ammospermophilus harrisii*
Birds	
Gambel's quail	*Callipepla gambelii*
Turkey vulture	*Cathartes aura*
Reptiles	
Western whiptail	*Cnemidophorus tigris*
Western fence lizard	*Sceloporus occidentalis*
PLANTS	
Cacti	
Buckhorn cholla	*Cylindropuntia acanthocarpa*
Barrel cactus	*Ferocactus cylindraceus*
Beaver-tail cactus	*Opuntia basilaris*
Trees	
Little-leaf paloverde	*Parkinsonia microphylla*
Shrubs	
Triangle-leaf bursage	*Ambrosia deltoidea*
White bursage	*Ambrosia dumosa*
4-wing saltbush	*Atriplex canescens*
Chuckwalla's delight	*Bebbia juncea*
Brittlebush	*Encelia farinosa*
Cheesebush	*Hymenoclea salsola*
Creosotebush	*Larrea tridentata*
Wolfberry	*Lycium* sp.
Desert chicory	*Rafinesquia neomexicana*
Wire lettuce	*Stephanomeria* sp.
Grasses and Forbs	
Fiddleneck	*Amsinckia intermedia*
Cryptantha	*Cryptantha* sp.
Desert trumpet	*Eriogonum inflatum* var. *inflatum*
Fluff grass	*Erioneuron* sp.
Pygmy poppy	*Eschscholzia minutiflora*
Arizona lupine	*Lupinus arizonicus*
Black mustard	
Combseed	*Pectocarya* sp.
Scorpion weed	*Phacelia crenulata*
Woolly plantain	*Plantago ovata*
Non-native and Weedy Species	
Saharan mustard	*Brassica tournefortii*
Filaree	*Erodium cicutarium*
Prostrate spurge	*Chamaesyce* sp.
Dodder	*Cuscuta* sp.*
Russian thistle	*Salsola iberica*
Mediterranean grass	*Schismus* sp.
London rocket	*Sisymbrium irio*

* State of Arizona Noxious Weed Species

Table 3.1 Threatened, Endangered, Candidate, and Delisted Species in Mohave County

Common name	Scientific name	Status	Suitable habitat present?	Occupied habitat present?	Critical habitat present?	Species affected?	Critical/ suitable habitat affected?
Plants							
Arizona cliffrose	*Purshia subintegra*	E	NO	NO	NO	NO	NO
Fickeisen plains cactus	*Pediocactus peeblesianus* var. *fickeiseniae*	C	NO	NO	NO	NO	NO
Gierisch mallow	*Sphaeralcea gierischii*	C	NO	NO	NO	NO	NO
Holmgren (Paradox) milk vetch	*Astragalus holmgreniorum*	E	NO	NO	NO	NO	NO
Jones cycladenia	*Cyclandenia humilis* var. *jonesii*	T	NO	NO	NO	NO	NO
Siler pincushion cactus	*Pediocactus sileri*	T	NO	NO	NO	NO	NO
Mammals							
Hualapai Mexican vole	*Microtus mexicanus hualapaiensis*	E	NO	NO	NO	NO	NO
Birds							
American peregrine falcon	*Falco pereginus anatum*	D	NO	NO	NO	NO	NO
Bald eagle (Southwestern population)	*Haliaeetus leucocephalus*	D	NO	NO	NO	NO	NO
California brown pelican	*Pelecanus occidentalis californicus*	D	NO	NO	NO	NO	NO
California condor	*Gymnogyps californianus*	E	NO	NO	NO	NO	NO
California least tern	*Sterna antillarum browni*	E	NO	NO	NO	NO	NO
Mexican spotted owl	*Strix occidentalis lucida*	T	NO	NO	NO	NO	NO
Southwestern willow flycatcher	*Empidonax trailii extimus*	E	NO	NO	NO	NO	NO
Yuma clapper rail	*Rallus longirostris yumanensis*	E	NO	NO	NO	NO	NO
Yellow-billed cuckoo	*Coccyzus americanus*	C	NO	NO	NO	NO	NO
Reptiles and Amphibians							
Desert tortoise (Mohave population)	*Gopherus agassizii*	T	NO	NO	NO	NO	NO
Desert tortoise (Sonoran population)	*Gopherus agassizii*	C	YES	NO	NO	NO	NO
Relict leopard frog	*Lithobates* (*Rana*) *onca*	NO	NO	NO	NO	NO	NO
Fish							
Bonytail chub	*Gila elegans*	E	NO	NO	NO	NO	NO
Humpback chub	*Gila cypha*	E	NO	NO	NO	NO	NO
Razorback sucker	*Xyrauchen texanus*	E	NO	NO	NO	NO	NO
Roundtail chub	*Gila robusta*	C	NO	NO	NO	NO	NO

Table 3.1 Threatened, Endangered, Candidate, and Delisted Species in Mohave County (con't)

Common name	Scientific name	Status	Suitable habitat present?	Occupied habitat present?	Critical habitat present?	Species affected?	Critical/ suitable habitat affected?
Fish (continued)							
Virgin River chub	*Gila seminuda*	E	NO	NO	NO	NO	NO
Virgin spinedace	*Lepidomeda mollispinis mollispinis*	CA	NO	NO	NO	NO	NO
Woundfin	*Plagopterus argentissimus*	E	NO	NO	NO	NO	NO

E = Federally listed as Endangered
T = Federally listed as Threatened
C = Candidate species
CA = Conservation Agreement
D = Delisted

3.1 DESERT TORTOISE (SONORAN POPULATION)

The Sonoran Population of desert tortoise (Gopherus agassizii) is listed as a federal candidate species. The species is primarily on rocky hillsides and bajadas of Mohave and Sonoran desertscrub but may also use desert grassland, juniper woodland, interior chaparral, and pine communities up to 7,800 feet elevation (FWS 2012).

Habitat for the desert tortoise does exist in the study area; however, the soils in the study area are generally not suitable for burrowing and the area would likely be used only as dispersal and movement corridors. Several caliche caves that could be used as burrows are present east of the study area along the south bank of Wing Mine Wash. However, during field surveys no sign of use by tortoises was noticed at the caliche caves or within the study area.

As no desert tortoise sign was found during field surveys and the lack of suitable burrowing substrates it is unlikely that the species is utilizing the study area. Given the lack of use of the study area the proposed project should have no impact on the desert tortoise. In the event that a desert tortoise is found within the study area during construction or ground disturbing activities the AGFD *Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects* (2007) should be implemented.

3.2 MIGRATORY BIRD TREATY ACT

The Migratory Bird Treaty Act (MBTA) and Executive Order 13186, *Responsibilities of Federal Agencies to Protect Migratory Birds*, state that all migratory birds and their parts (including eggs, nests, and feathers) are fully protected in the United States.

Species protected under the MTBA, were seen within the study area during field surveys, although no nests were identified. The migratory bird breeding season is typically from March 1 to August 31. To avoid impacts on migratory birds all ground disturbing activities would occur outside of the breeding season. If any ground disturbing work occurs within the breeding season then areas to be disturbed should be surveyed prior to disturbance and any areas with active nests avoided.

4. PROTECTED NATIVE PLANTS

Atkins Biologist Jeff Johnson surveyed the study area for the presence of plants protected under the Arizona Native Plant Law. The following Salvage Restricted Protected Native Plants were found within the study area: barrel cactus (*Ferocactus cylindraceus*), buckhorn cholla (*Cylindropuntia acanthocarpa*), and beaver-tail cactus (*Opuntia basilaris*). The Arizona Department of Agriculture must be notified and permits secured prior to any salvage-restricted plants being disturbed, moved, or removed from the site.

REFERENCES

Arizona Game and Fish Department (AGFD). 2007. Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects. Accessed online April 10, 2012 at http://www.azgfd.gov/hgis/pdfs/Tortoisehandlingguidelines.pdf

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